

Amendments to the Claims:

Claims 1-2 (cancelled).

Claim 3 (previously presented): A postage stamp or shipping label having first and second spaced apart facing major surfaces between which is mounted a radio frequency identification (RFID) system operative to store identifying data therein representative of an article being mailed or shipped and to which the stamp or label is affixed, and said RFID system being operative to receive RF signals and store data therein and further being operative to transmit this data by way of RF signals which are transmitted to an interrogator upon request at the point of article mailing or shipment, points along a given shipment route, and upon reaching a point of destination, wherein said RFID system includes an integrated circuit (IC) chip having therein an RF transmitter, an RF receiver, a memory stage and a control logic, a thin flat battery connected to said IC chip, and a thin RF antenna disposed adjacent to said battery and IC chip and operative to transmit and receive RF signals and couple said RF signals to and from said IC chip during the interrogation thereof.

Claim 4 (cancelled).

Claim 5 (previously presented): The invention defined in claim 3 wherein said integrated circuit transceiver and said thin flat battery are mounted in side-by-side configuration on an underlying base material disposed on one of said facing major surfaces of said stamp or label.

Claim 6 (original): The invention defined in claim 5 wherein said thin RF antenna includes one or more thin metal strips mounted on said base material and connected to one or more terminals, respectively, on said IC chip for providing both RF transmission from and reception to said IC transceiver chip.

Claim 7 (original): The invention defined in claim 6 wherein said antenna is defined by said battery or a ground plane.

Claim 8 (previously presented): The invention defined in claim 6 wherein said thin flat battery includes a lithium anode layer and a conductive collector layer separated by a polymerized cathode electrolyte and separator layer.

Claim 9 (original): The invention defined in claim 8 wherein said cathode layer contains an oxide of vanadium or magnesium.

Claim 10 (previously presented): The invention defined in claim 3 wherein the thickness of said thin flat battery is within the range of a fraction of a mil to 10 mils.

Claim 11 (previously presented): The invention defined in claim 9 wherein the thickness of said thin flat battery is within the range of a fraction of a mil to 10 mils.

Claim 12 (previously presented): The invention defined in claim 3 wherein said IC chip is replaced with an electro-optical light operated IC chip and operated to propagate light of a given wavelength to an interrogator while also being powered by one or more thin flat battery cells less than 10 mils in thickness.

Claims 13-22 (cancelled).

Claim 23 (previously presented): A postage stamp or shipping label having first and second spaced apart facing major surfaces, and having an electro-optical light operated IC system between the major surfaces, the system being operative to store identifying data therein representative of an article being mailed or shipped and to which the stamp or label is affixed, and said system being operative to receive optical signals and store data and further being operative to transmit this data by way of optical signals which are transmitted to an interrogator upon request at the point of article mailing or shipment, points along a given shipment route, and upon reaching a point of destination, wherein said system includes an electro-optical light operated integrated circuit (IC) having a transmitter, a receiver, a memory, and control logic, the system further including two thin flat batteries coupled to the IC chip, and wherein the system includes a conductive strip on one of the first and second spaced apart facing major surfaces coupling, in series, one of the batteries to the other battery.

Claim 24 (previously presented): The invention defined in claim 23 wherein said integrated circuit transceiver and said thin flat batteries are mounted in side-by-side configuration on an underlying base material disposed on one of said facing major surfaces of said stamp or label.

Claim 25 (previously presented): The invention defined in claim 24 wherein said conductive strip is a thin metal strip.

Claim 26 (previously presented): The invention defined in claim 25 wherein said thin flat batteries includes a lithium anode layer and a conductive collector layer separated by a polymerized cathode electrolyte and separator layer.

Claim 27 (previously presented): The invention defined in claim 26 wherein said cathode layer contains an oxide of vanadium or magnesium.

Claim 28 (previously presented): The invention defined in claim 23 wherein the thickness of said thin flat battery is within the range of a fraction of a mil to 10 mils.

Claim 29 (previously presented): The invention defined in claim 27 wherein the thickness of said thin flat battery is within the range of a fraction of a mil to 10 mils.

Claim 30 (previously presented): A postage stamp or shipping label comprising:

first and second spaced apart facing major surfaces;
a radio frequency identification (RFID) system, between the first and second major surfaces, operative to store identifying data therein representative of an article being mailed or shipped and to which the stamp or label is affixed, said RFID system being operative to receive RF signals and store data therein and further being operative to transmit the data by way of RF signals which are transmitted to an interrogator upon request at a point of article mailing or shipment, points along a given shipment route, and upon reaching a point of destination, the RFID system including:

an integrated circuit having an RF transmitter, an RF receiver, a memory stage and a control logic;

a thin flat battery connected to the integrated circuit; and
an RF antenna disposed adjacent to said battery and integrated circuit and operative to transmit and receive RF signals and couple said RF signals to and from the integrated circuit during the interrogation thereof.

Claim 31 (previously presented): The invention defined in claim 30 wherein said integrated circuit and said thin flat battery are mounted in side-by-side configuration on an underlying base material disposed on one of said facing major surfaces of said stamp or label.

Claim 32 (previously presented): The invention defined in claim 31 wherein said RF antenna includes one or more thin metal strips mounted on said base material and connected to one or more terminals, respectively, on said integrated circuit for providing both RF transmission from and reception to said integrated circuit.

Claim 33 (previously presented): The invention defined in claim 32 wherein said antenna is defined by said battery or a ground plane.

Claim 34 (currently amended): The invention defined in claim 32 wherein said thin flat film battery includes a lithium anode layer and a conductive collector layer separated by a polymerized cathode electrolyte and separator layer.

Claim 35 (previously presented): The invention defined in claim 34 wherein said cathode layer contains an oxide of vanadium or magnesium.

Claim 36 (previously presented): The invention defined in claim 30 wherein the thickness of said thin flat battery is within the range of a fraction of a mil to 10 mils.

Claim 37 (previously presented): The invention defined in claim 36 wherein the thickness of said thin flat battery is within the range of a fraction of a mil to 10 mils.